

VPort 251

Full motion, 1-channel MJPEG/MPEG4 video encoder



Highlights

- Compress analog video/audio signals into MJPEG/MPEG4 video stream
- Video stream up to 30 frames/sec at full D1 (720x 480) resolution
- 2-way (1 in, 1 out) audio supported
- Transparent PTZ control for using legacy PTZ control panel or keyboard
- Loop-through power output for powering an analog camera
- Free VPort SDK PLUS and 4-channel video surveillance software



Features

High Performance Audio/Video Networking Solution

- Works with NTSC/PAL analog video cameras
- MJPEG/MPEG4 video compression technology
- 1 BNC video input
- 1 audio input and 1 audio output for 2-way voice communication
- Standard RTSP (real-time streaming protocol) for easy integration
- Multicast (IGMP) protocols for efficient network transmission
- Supports QoS (ToS) for setting video data priority in network traffic
- Built-in web server and RS-232 console for remote access and configuration
- 1 auto-sensing 10/100BaseT(X) Ethernet port
- TCP, UDP, and HTTP network transmission modes
- Simultaneous access for up to 10 clients
- Configure video quality for CBR (constant bit rate) or VBR (variable bit rate)
- Full D1, 4CIF, VGA, CIF, and QVGA video resolutions supported
- Timestamp and text overlay supported
- 1 RS-232/RS-422/RS-485 COM port for controlling a PTZ (PAN/TILT/ZOOM) motorized camera
- Supports Transparent PTZ control for cameras controlled by legacy PTZ joystick or controller
- DDNS, UPnP and IP filtering supported

Intelligent Alarm Triggered Capability

- Built-in 3-area selectable Video Motion Detection (VMD)
- Equipped with 1 DI and 1 Relay (DO) for external sensor and alarm
- Video loss alarm supported
- Pre, trigger, and post alarm snapshot images provided
- Sequential snapshot images supported
- Messages with recorded video and snapshot images can be sent via FTP and email
- HTTP action setting for alarm messages sent by HTTP event server
- Alarm schedule setting capability

Convenient Hardware Installation

- Compact form factor suitable for most installation locations
- Supports panel mounting and DIN-Rail mounting (with DK-35A accessory)
- Supports 1 loop-through power output (power range same as power input) for powering an analog camera

Video Management and Control

- MOXA SoftDVR™ Lite IP Surveillance Software for viewing and recording bundled free
- Free MOXA VPort SDK PLUS supported with flexible interface and sample codes for customized applications or system integration

Introduction

The VPort 251 is a high performance, 1-channel video encoder with compact form factor that is suitable for installation in a variety of locations, including outdoor camera cabinets. To make installation easier, the VPort 251 supports both panel mounting and DIN-Rail mounting (with DK-35A accessory), and 1 loop-through power output for powering an analog camera. In addition, the VPort 251 provides

up to full D1, full frame rate video performance (NTSC: 720 x 480 up to 30 FPS; PAL: 720 x 576 up to 25 FPS) and supports both MJPEG or MPEG4, making it especially well suited for use with distributed video surveillance systems. A 2-way audio function is also provided for the convenience of real-time communication between system administrators located at the central site, and engineers in the field.

Specifications

Video

Video Compression: MJPEG, MPEG4 (ISO/IEC 14496-2)

Video Inputs: 1, BNC connector

NTSC/PAL: Auto-sensing or manual

Video Resolution and FPS (frame per second):

	NTSC		PAL	
	Size	Max. FPS	Size	Max. FPS
QVGA	320 x 240	30	320 x 288	25
CIF	352 x 240	30	352 x 288	25
VGA	640 x 480	30	640 x 576	25
4CIF	704 x 480	30	704 x 576	25
Full D1	720 x 480	30	720 x 576	25

Video Viewing:

- Adjustable image size and quality
- Timestamp and text overlay

Audio

Audio Input: 1 Line-in or Mic-in

Audio Output: 1 Line-out

Network

Protocols: TCP, UDP, HTTP, SMTP, FTP, Telnet, NTP, DNS, DHCP, UPnP, RTP, RTSP, ICMP, IGMPv3, QoS, DDNS, SNMPv3

Ethernet: 1 RJ45 port, 10/100BaseT(X) auto negotiation

Serial Port

PTZ Port: 1, RS-232 or RS-422/485 terminal block connector, maximum baudrate of 115.2 Kbps

Console Port: 1 RS-232 RJ45 port

GPIO

Digital Input: 1, max. 8 mA

“High”: +13V to +30V

“Low”: -30V to +3V

Relay Output: 1 (max. 24 VDC @ 1A)

LED Indicators

STAT: Indicates if the system boots properly or not

VIDEO: Video input signal active

PTZ: PTZ control signal active

Physical Characteristics

Dimensions (W x H x D):

107 x 110 x 50 mm (4.21 x 4.33 x 1.96 in.)

Weight: 850 g

Installation: Wall or panel mounting;
DIN-Rail mounting (optional kit)

Power Requirements

Input: 12/24 VDC or 24 VAC power input

Output: 2-pin terminal block connector for loop-through from power input

Power Consumption: max. 7.5W

Environmental Limits

Operating Temperature: 0 to 60°C (32 to 140°F)

Storage Temperature: -40 to 85°C (-40 to 185°F)

Humidity: 5% to 95% (non-condensing)

Regulatory Approvals

EMI: FCC Part 15, CISPR (EN55022) class A

EMS: EN61000-4-2 (ESD), level 2

EN61000-4-3 (RS), level 3

EN61000-4-4 (EFT), level 3

EN61000-4-5 (Surge), level 3

EN61000-4-6 (CS), level 3

EN61000-4-8

EN61000-4-12

Shock: IEC60068-2-27

Freefall: IEC60068-2-32

Vibration: IEC60068-2-6

Warranty

5 years (see www.moxa.com/warranty for details)

Alarm Features

- Video motion detection with sensitivity tuning
- Video loss alarm
- Daily repeat timing schedule
- JPEG snapshots for pre/trigger/post alarm images
- Automatic transfer of stored images by email or FTP with event-triggered actions
- HTTP Event Servers for setting customized alarm actions

PAN/TILT/ZOOM

- PTZ camera control through RS-232/422/485 port
- PTZ control functions: PAN, TILT, ZOOM, FOCUS, moving speed, preset position (max. 25 positions)
- 10 custom commands for customized PTZ control
- Supported devices and protocols:
Pelco D, P protocol, Dynacolor DynaDOME, Custom Camera
- PTZ driver upload supported
- Supports transparent PTZ camera control for controlling the PTZ camera with legacy PTZ control panel or keyboard connected with a PC or VPort decoder

Security

- User level password protection
- IP address filtering

Recommended System Requirements

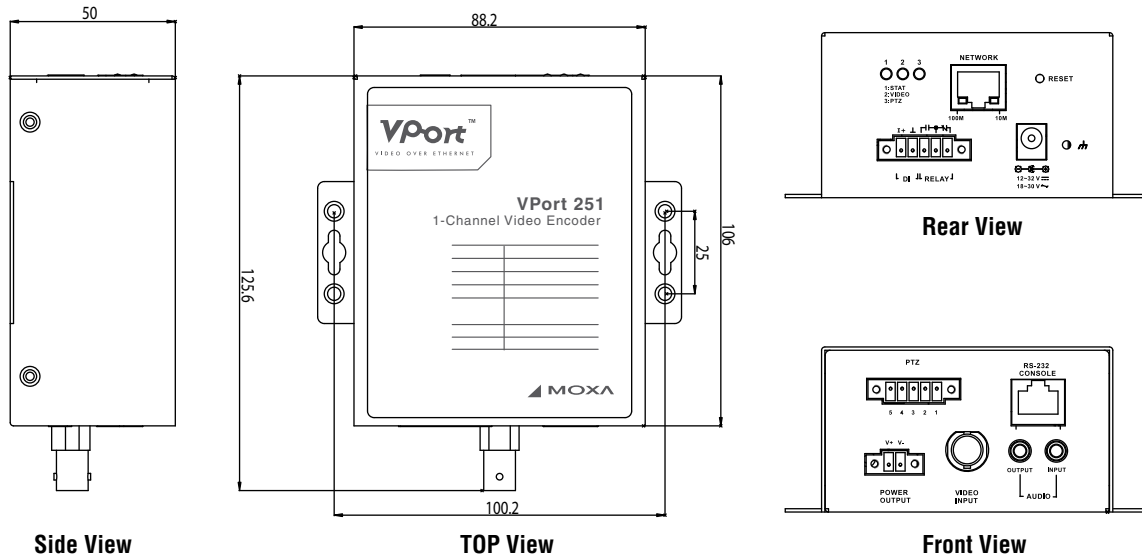
- Pentium 4, 2.4 GHz or above
- 512 MB memory or above
- Windows XP/2000 with SP2 or above
- Internet Explorer 6.x or above
- DirectX 9.0c or above

Software Bundled Free

Moxa SoftDVR™ Lite: 1 to 4-ch IP surveillance software for viewing and recording

VPort SDK PLUS: Includes CGI commands and ActiveX Control for customized application or system integration for third-party developer (Please go to Moxa's website to download the latest SDK version.)

Dimensions (unit = mm)



: Ordering Information

VPort 251: 1-channel MJPEG/MPEG4 video encoder, 0 to 60°C

Optional Accessories

- **SoftDVR™ Pro:** 16-channel IP surveillance software for viewing and recording
- **Power Adaptor**
 - US Plug: 120VAC, 60Hz, P/N: 1117000025100
 - GER Plug: 230VAC, 50Hz, P/N: 1117000025200
 - UK Plug: 230VAC, 50Hz, P/N: 1117000025400
 - JP Plug: 100 to 240VAC, 50Hz/60Hz, P/N: 1117000022700
- **DK-35A:** DIN-Rail mounting kit (35 mm)